



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,205	08/18/2003	Pierre Raymond	4384-000012	4054

27572 7590 01/23/2007
HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

RAO, ANAND SHASHIKANT

ART UNIT	PAPER NUMBER
----------	--------------

2621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/643,205

Applicant(s)

RAYMOND ET AL.

Examiner

Andy S. Rao

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/6/04</u> . | 6) <input type="checkbox"/> Other: ____ |

Art Unit: 2621

DETAILED ACTION

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oron in view of Arlton et al., (hereinafter referred to as "Arlton").

Oron disclose an apparatus for performing reconnaissance, intelligence- gathering and surveillance over a zone (Oron: figure 1), the apparatus being of the type comprising: means forming a projectile launcher (Oron: column 6, lines 30-34), a projectile equipped with a camera and with an image transmitter circuit (Oron: column 5, lines 50-57), and a receiver member for receiving the images transmitted in this way, said apparatus including the launcher-forming means are of a type that is individual (Oron: column 1, lines 20-25), and manually operated, and in that the receiver member comprises a viewing monitor and a receiver circuit, both of which are small in size so as to form a receiver member that is also individual, and portable (Oron: column 6, lines 50-62), as in claim 1. However, Oron fails to disclose that the launcher means is

Art Unit: 2621

portable so that they can be carried by an individual person, and that the receiver member that is also individual, and portable, so that the apparatus can be used and transported by a person, as in the claim. Arlton discloses an apparatus for aerial surveillance apparatus (Arlton: figure 4) including an individually deployable and controllable micro-rotorcraft (Arlton: paragraph [0047], lines 10-15) in order to protect the location of the mobile command unit or ordinance used to launch a projectile type surveillance and reconnaissance apparatus (Arlton: paragraph [0045], lines 1-7). Accordingly, given this teaching, it would have been obvious for one of ordinary skill in the art to incorporate the use of a portable launch system as shown in Arlton into the Oron system, in order to protect the location of the Oron ground station (Oron: column 6, lines 50-62). The Oron projectile launched surveillance and reconnaissance apparatus, now incorporating the Arlton portable launch system, has all of the features of claim 1.

Regarding claim 2, the Oron projectile launched surveillance and reconnaissance apparatus, now incorporating the Arlton portable launch system, has wherein the receiver member and the transmitter circuit communicate in real time using a suitable communications mode and generally directly between said transmitter circuit and said receiver member (Arlton: paragraph [0044], lines 1-17), as in the claim.

Regarding claims 3-4, the Oron projectile launched surveillance and reconnaissance apparatus, now incorporating the Arlton portable launch system, has wherein the projectile has a caliber that is generally about 12.7 mm to about 60 mm (Arlton: column 6, lines 30-35), as in the claims

Regarding claim 5, the Oron projectile launched surveillance and reconnaissance apparatus, now incorporating the Arlton portable launch system, has wherein the projectile is

Art Unit: 2621

provided with a means for at least one of stabilizing and slowing down its fall (Oron: column 1, lines 1, 60-63).

Regarding claim 6, the Oron projectile launched surveillance and reconnaissance apparatus, now incorporating the Arlton portable launch system, has wherein the projectile is provided with a guide means (Oron: column 1, lines 37-40), as in the claim.

Regarding claim 7, the Oron projectile launched surveillance and reconnaissance apparatus, now incorporating the Arlton portable launch system, has wherein the projectile includes a compartment suitable for receiving an object of the type belonging to the group comprising a mobile telephone, a military charge, a medication, a provision, and combinations thereof (Arlton: paragraph [0072], lines 1-7), as in the claim.

Regarding claim 8, the Oron projectile launched surveillance and reconnaissance apparatus, now incorporating the Arlton portable launch system, has wherein the camera is of a charge coupled device (CCD), complimentary metal-oxide silicon (CMOS), or digital (Arlton: [0046], lines 1-21), as in the claim.

Regarding claim 9, the Oron projectile launched surveillance and reconnaissance apparatus, now incorporating the Arlton portable launch system, has wherein the launcher-forming means are provided with means for protecting the hands of the user (Arlton: paragraph [0080], lines 1-20), as in the claim.

Regarding claim, the Oron projectile launched surveillance and reconnaissance apparatus, now incorporating the Arlton portable launch system, has wherein the means forming a projectile launcher are portable by a person during the launching of the projectile (Arlton: paragraph [0085], lines 1-7), as in the claim.

Oron discloses a method of performing reconnaissance, intelligence- gathering, and surveillance over a zone, which method (Oron: column 3, lines 15-32) is of the type comprising the following steps: launching a projectile equipped (Oron: column 6, lines 30-34) with an on-board camera and with a transmitter circuit (Oron: column 5, lines 50-57); picking up images and transmitting the images picked up in this way (Oron: column 1, lines 20-25); receiving the images and viewing them (Oron: column 6, lines 50-62); performed in real time (Oron: column 1, lines 45-50), as in claim 11. However, Oron fails to disclose that the method is implemented in a portable fashion that can be performed by an individual person, and that the receiver member that is also individual, and portable, and can be used and transported by a person, as in the claim. Arlton discloses a method for surveillance and reconnaissance (Arlton: figure 4) including the use of an individually deployable and controllable micro-rotorcraft (Arlton: paragraph [0047], lines 10-15) in order to protect the location of the mobile command unit (Arlton: paragraph [0045], lines 1-7). Accordingly, given this teaching, it would have been obvious for one of ordinary skill in the art to incorporate the use of a portable launching step as shown in Arlton into the Oron method, in order to protect the location of the Oron ground station (Oron: column 6, lines 50-62). The Oron projectile launched surveillance and reconnaissance method, now incorporating the Arlton portable launching step, has all of the features of claim 11.

Regarding claim 12, the Oron projectile launched surveillance and reconnaissance method, now incorporating the Arlton portable launching step, has providing a compartment suitable for receiving an object, and taking said object on board (Arlton: paragraph [0072], lines 1-7), as in the claim.

Regarding claim 13, the Oron projectile launched surveillance and reconnaissance method, now incorporating the Arlton portable launching step, has retrieving the projectile after landing so as to re-use at least certain elements of the apparatus (Arlton: paragraph [0074], lines 1-5), as in the claim.

Oron discloses an apparatus (Oron: figure 1) comprising: a projectile launcher (Oron: column 6, lines 30-34); a projectile operably launched by said projectile launcher; the projectile including: a camera operable to transmit an image through a first circuit (Oron: column 5, lines 50-57); and a receiver operably receiving images transmitted by said first circuit (Oron: column 1, lines 20-25), as in claim 14. However, Oron fails to disclose that the launcher means is portable so that they can be carried by an individual person, and that the receiver member that is also individual, and portable, so that the apparatus can be used and transported by a person, as in the claim. Arlton discloses an apparatus for aerial surveillance apparatus (Arlton: figure 4) including an individually deployable and controllable micro-rotorcraft (Arlton: paragraph [0047], lines 10-15) in order to protect the location of the mobile command unit or ordinance used to launch a projectile type surveillance and reconnaissance apparatus (Arlton: paragraph [0045], lines 1-7). Accordingly, given this teaching, it would have been obvious for one of ordinary skill in the art to incorporate the use of a portable launch system as shown in Arlton into the Oron system, in order to protect the location of the Oron ground station (Oron: column 6, lines 50-62). The Oron projectile launched surveillance and reconnaissance apparatus, now incorporating the Arlton portable launch system, has all of the features of claim 14.

Regarding claim 15, the Oron projectile launched surveillance and reconnaissance apparatus, now incorporating the Arlton portable launch system, has wherein the receiver

Art Unit: 2621

includes: a second circuit operably receiving the signal transmitted by the first circuit; and a monitor operably displaying the signal received by the second circuit; wherein the person is able to view the signal displayed on the monitor (Arlton: paragraph [0047], lines 1-12), as in the claim.

Regarding claim 16, Oron projectile launched surveillance and reconnaissance apparatus, now incorporating the Arlton portable launch system, has wherein said first and second circuits communicate in real time in a substantially direct manner (Arlton: paragraph [0044], lines 1-12), as in the claim.

Regarding claim 17, the Oron projectile launched surveillance and reconnaissance apparatus, now incorporating the Arlton portable launch system, has wherein a caliber of the projectile is about 12.7 mm to about 60 mm (Oron: column 6, lines 30-40), as in the claim.

Regarding claim 18, the Oron projectile launched surveillance and reconnaissance apparatus, now incorporating the Arlton portable launch system, has comprising a stabilizing mechanism acting to at least one of: stabilize and slow down, a fall of said projectile after said projectile is launched from said projectile launcher (Oron: column 1, lines 55-60), as in the claim.

Regarding claim 19, the Oron projectile launched surveillance and reconnaissance apparatus, now incorporating the Arlton portable launch system, has a guide mechanism operably guiding said projectile through a selected path (Oron: column 4, lines 34-39), as in the claim.

Regarding claim 20, the Oron projectile launched surveillance and reconnaissance apparatus, now incorporating the Arlton portable launch system, has a compartment suitable for

Art Unit: 2621

receiving an object essentially selected from a group comprising: a mobile telephone, a military charge, a medication, a provision, and combinations thereof (Arlton: paragraph [0072], lines 1-7), as in the claim.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cameron discloses an aerial distress flare. Nielsen discloses a multi-spectral target marker. Carter discloses an aircraft incident surveillance system. Herrmann discloses an reconnaissance sonde. Kearns discloses a gun launched reconnaissance system. Woodland discloses an sonotube compatible unmanned aerial vehicle and system.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andy S. Rao
Primary Examiner
Art Unit 2621

asr

January 16, 2007

ANDY RAO
PRIMARY EXAMINER

